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OPEN PANELLING

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- (56) Prior Art Documents AU 64471/65 78.71 AU 246718 56513/60 81.5, 78.71 AU 132823 6963/46 81.5, 78.71
- (57) Claim
- 1. Lattice panelling including a plurality of spaced slats forming opposed layers supported by frame means to form a panel and insect proof screen extending across the spaces bounded by said slats and being sandwiched between respective layers of said slats.
- 6. A method of manufacturing panelling as defined in any one of Claims 1 to 5, including providing a table as hereinbefore defined having lower locating means for locating a lowermost layer of slats in spaced parallel relationship and outer locating means for locating an outermost layer of slats on said lowermost layer of slats in spaced parallel relationship and at a selected angle thereto, said outer locating means terminating inwardly of the

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outer face of said outermost layer of slats; locating the lowermost bank of slats between said lower locating means; covering the located said lowermost bank of slats with screen; locating the outermost bank of slats between said upper locating means; securing the outermost bank of slats to the lowermost bank of slats at points of coincidence therebetween by mechanical fastenings passing through said screen.



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her by apply for the grant of a Patent for an invention entitled:- "OPEN PANELLING"

which is described in the accompanying provisional specification.

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My Your address for service is: PIZZEY & COMPANY PATENT ATTORNEYS, OF 4th Floor, Oantas House, 262 Adelaide Street, BRISBANE. Q 4000. AUSTRALIA.

> day of February, 1987 Dated this Twenty-Fifth

by PIZZEY & COMPANY PATENT ATTORNEYS.

To: The Commissioner of Patents, Commonwealth of Australia.

COMMONWEALTH OF AUSTRALIA Patents Act 1952

DECLARATION IN SUPPORT OF AN APPLICATION FOR A PATENT

In support of Application No. 12090/88 made by R.G. Draper, K. Draper and W.P. Hanley, D. Hanley for a patent for an invention entitled "OPEN PANELLING"

WE, RAYHOND GREGORY DRAPER and KAY DRAPER of 4 Winton Place, Beenleigh. Queensland. 4207. and

WILLIAM PATRICK HANLEY and DELL HANLEY of 848 Wynnum Road, Cannon Hill. Queensland. 4170.

do solemnly and sincerely declare as follows:-

- 1. We are the applicants for the patent.
- 2. We are the actual inventors of the invention.

TO:- THE COMMISSIONER OF PATENTS

RAYLOND GREGORY DRAPER

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RAYMOND GREGORY DRAPER AND KAY DRAPER AND

WILLIAM PATRICK HANLEY AND DELL HANLEY

(Patent Applications Nos. PI 0507 and PI 0535)

COMPLETE SPECIFICATION FOR THE INVENTION ENTITLED: -

"OPEN PANELLING"

The following statement is a full description of this invention, including the best method of performing it known to us:-

This invention relates to panelling and in particular it relates to open panelling. However it is to be understood that this invention is not limited to open panelling.

Open panelling such as latticework is widely used for enclosing verandas or courtyards to provide privacy and/or a partial shield against the sun and weather. It is also used in the construction of pergolas and the like. While it is very effective in use, panelling such as latticework has the disadvantage that it 10 does not form a barrier against insects, the sun or the weather. External and internal roll-up or clip-on screens have been added to latticework panels for such purposes but these unsatisfactory and unsightly in use for various reasons. example, external screens may not seal around the edges of the 15 panelling. External screens may also flap around in windy weather and are prone to damage.

This invention aims to alleviate the above and other disadvantages and to provide panelling and a method of manufacturing same which will be reliable and efficient in use. 20 Other objects and advantages of this invention will hereinafter become apparent.

With the foregoing and other objects in view, this invention in one aspect resides broadly in lattice panelling including a plurality of spaced slats forming opposed layers supported by 25 frame means to form a panel and screen extending across the gaps



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bounded by said slats. The screen is preferably flexible but it may be of rigid metallic forms if desired. Suitably the screen is stapled or glued to the individual slats or interwoven about successive spaced slats. Preferably however, the screen is sandwiched between respective layers of slats. The layers of slats may overlie one another or be arranged angularly to one another to form latticework. The respective layers of slats may each comprise a plurality of spaced slats arranged parallel to one another and the slats of the respective layers may be interconnected by mechanical fastening means at points of coincidence to secure the screen therebetween. Of course the slats could be glued together at points of coincidence if desired.

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Preferably the slats are formed of timber but of course they could be formed of metal or plastics material. It is also preferred that the slats be supported within a perimeter frame which has a recessed inner face to receive the ends of the slats and the respective edges of the screen. The slats may be glued to the perimeter frame or be mechanically fastened to the perimeter frame through a side face thereof. The screen may be insect screen or shade cloth or the like or it may be a plastics film or fabric if desired.

In another aspect, this invention resides broadly in a method of manufacturing panelling of the type having screen material sandwiched between opposed layers of slats arranged

angularly to one another, the method including providing a table having lower locating means for locating a lowermost layer of slats in spaced parallel relationship and outer locating means for locating an outermost layer of slats on said lowermost layer of slats in spaced parallel relationship and at a selected ungle thereto, said outer locating means terminating inwardly of the outer face of said outermost layer of slats; locating the lowermost bank of slats between said lower locating means; covering the located said lowermost bank of slats with screen; locating the outermost bank of slats between said upper locating means; securing the outermost bank of slats to the lowermost bank of slats at points of coincidence therebetween by mechanical fastenings passing through said screen. The lower and outer location means may be formed on common or separate projections on said table.

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Preferably the outer ends of the slats are arranged to extend outwardly beyond said table and the slats are trimmed by performing a first cut which is adapted to penetrate only the outermost bank of slats, a second cut which severs the screen and a third cut which penetrates the lowermost bank of slats. The first and third cuts are preferably performed with a circular saw. The term table used herein is to be understood as embracing horizontal and inclined or vertical supporting surfaces.

In another aspect this invention resides in a forming table as defined above. Suitably the upper projections extend outwardly to engage with only the lower portion of said outermost slats whereby the screen is not overly distorted as it passes over the upper projections and under the outermost slats.

Panels according to this invention may be used to construct pergolas, shade houses and the like and this invention embraces such constructions when formed from panelling of this invention.

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In order that this invention may be more readily understood and put into practical effect, reference will now be made to the accompanying drawings which illustrate a corner portion of a typical embodiment of this invention.

As shown in the drawings, the open panelling 10 includes opposed banks of spaced parallel slats 11 and 12 arranged at right angles to one another and at forty five degrees to the perimeter framing 13. The insect screen 14 is sandwiched between the banks of slats 11 and 12 and it is exposed only in the open spaces between the slats. In this embodiment the slats 11 and 12 are formed from treated timber and they are fustened together at points of coincidence by stapling, suitably with stainless steel staples 20.

The perimeter frame 13 is also formed of timber. Each member of the perimeter frame 13 is provided with a recess 15

along its inner face 16 to receive the ends 17 of the sluts and the outer edge of the insect screen 14. The slats 11 and 12 may be glued into the recess 15 or fastened with staples on nails extending through the side wall 18 of the frame 13 to engage the ends 17 of the slats 11 and 12.

The open panelling 10 can be used as a structural panel

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for building walls of shade houses or pergolas or the like or for enclosing open living areas. In such applications, the open panelling 10 can be erected in conventional manner. During erection, transport to the site of erection and use, the slats 11 and 12 provide protection against damage to the screen 14. Furthermore, damage which may be caused to the screen is localised by the bounding slats and may be simply

panelling. The panelling 10 can be formed in any desired size such as in wall size panels or in window panels.

repaired without detracting from the appearance of the

It will of course be realised that the above has been given only by way of illustrative example of the present invention and that all such modifications and variations thereto as would be apparent to persons skilled in the art are deemed to fall within the broad scope and ambit of this invention as is defined in the appended claims.

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THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS.

- 1. Lattice panelling including a plurality of spaced slats forming opposed layers supported by frame means to form a panel and insect proof screen extending across the spaces bounded by said slats and being sandwiched between respective layers of said slats.
- Panelling as claimed in Claim 1, wherein said slats are interconnected by mechanical fastening means at points of coincidence of said layers of slats.
- 3. Panelling as claimed in any one of the preceding claims, wherein said slats are supported within a perimeter frame having frame members each provided with a recessed inner face in which the respective ends of said slats and the edges of said screen are received.
- 4. Panelling as claimed in Claim 3, wherein said slats are mechanically fastened to said perimeter frame through a side face thereof.
- 5. Panelling as claimed in any one of the preceding claims, wherein said screen is an open mesh material.
- 6. A method of manufacturing panelling as defined in any one of Claims 1 to 5, including providing a table as hereinbefore defined having lower locating means for locating a lowermost layer

of slats in spaced parallel relationship and outer locating means for locating an outermost layer of slats on said lowermost layer of slats in spaced parallel relationship and at a selected angle thereto, said outer locating means terminating inwardly of the outer face of said outermost layer of slats; locating the lowermost bank of slats between said lower locating means; covering the located said lowermost bank of slats with screen; locating the outermost bank of slats between said upper locating means; securing the outermost bank of slats to the lowermost bank of slats at points of coincidence therebetween by mechanical fastenings passing through said screen.

- 7. A method as claimed in Claim 6, wherein the outer ends of said slats are arranged to extend outwardly beyond said table and the slats are trimmed by performing a first cut which is adapted to penetrate only the outermost bank of slats, a second cut which severs the screen and a third cut which penetrates the lowermost bank of slats.
- 8. Panelling substantially as hereinbefore described with reference to the accompanying drawings.

DATED THIS fifteenth DAY OF November, 1990.

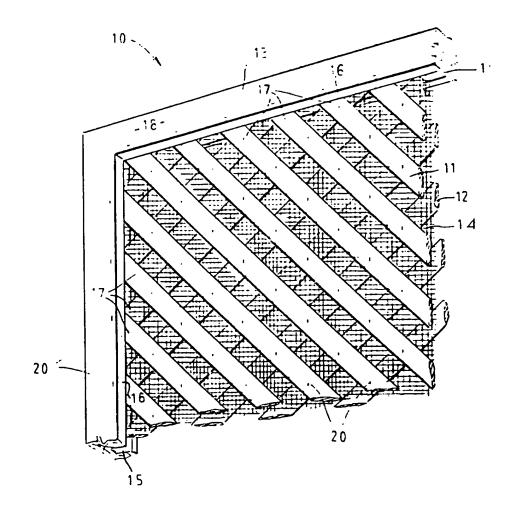
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